

Challenges in Thermodynamics

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This plenary lecture deals with some of the last challenges in thermodynamics related to distillation and solvent extraction.

- data banks and locations for measuring experimental data
- phase equilibria in reacting systems
- a priori prediction of thermodynamic properties (COSMO-RS, UNIFAC, MOSCED)
- new solvents for extractive distillation (ionic liquids, hyperbranched polymers)
- recent developments of equations of state (VLE, LLE, macromolecular systems)